

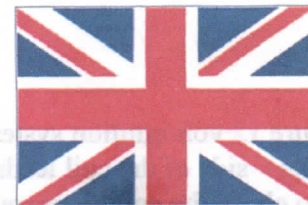
British Vacuum Unit

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Special TR6 vacuum advance.

Proper Zenith carburetor ported vacuum and distributor installation.

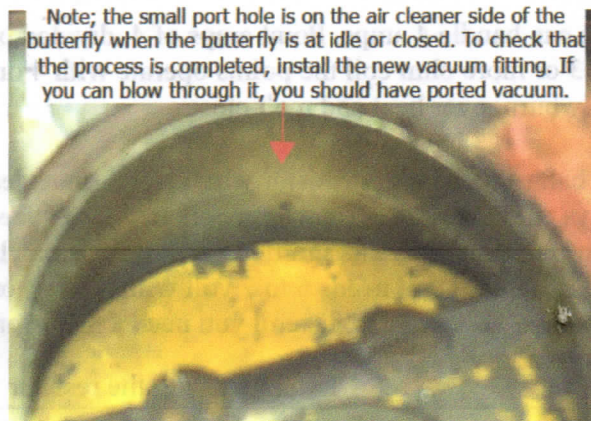
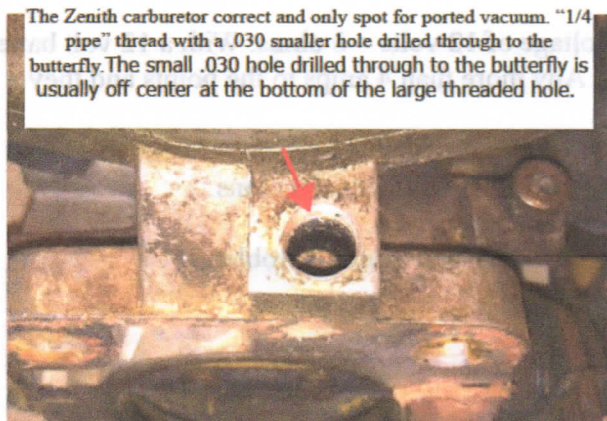
Zenith-Stromberg carburetor notes; Triumph TR6. Also Applies to Later Jaguar, MG etc

1971-73 TR6 Zenith carburetor numbers C3292, C3365, C3337, C 3385 and C3508 *may or may not have* the threaded port next to the rear top mounting flange over the throttle shaft. Some with the threaded hole *may or may not have* the small vacuum drilled through to the throttle *from the factory!* During 1971-73 Zenith-Stromberg may have drilled them or may have not completed the process.

If your Zenith carburetor was not finished from the factory, we can finish the process and set you up with ported vacuum.

This must be done with precision. BVU can machine the correct ported vacuum. Cost \$50.

1973-76 TR6 Zenith carburetor numbers C3613 and C3771 have the correct threaded ported vacuum next to the rear top mounting flange over the throttle shafts. This is the same port used for the EGR valve.



The new TR6 special vacuum advance now pushes and moves the point plate CW to advance.

The distributor drive gear below the cast iron base will need to be moved CC one tooth to align the distributor body in the original position. This should be simple and quick to do. Usually take no more than 5 minutes.

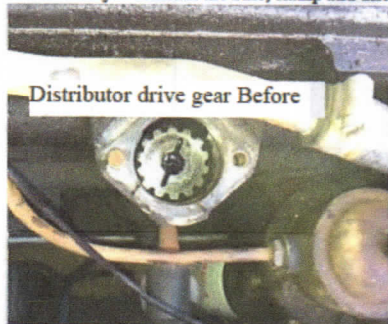
1- Remove the two 1/2 nuts holding the base in place.

2- Lift the base out of the way.

3- lift the gear just enough to dis-engage the drive teeth and move CC one tooth, drop in place.

4- Place the car in 4th gear and rock the car forward. As the engine turns the gear will drop completely in place engaging the oil pump drive.

5- Now when you reinstall the base, clamp and distributor all will align up as original. This will prevent any additional kinking of the tach cable.



We recommend all TR6 distributors be re-curved for modern fuels and maximum performance to prevent the mechanical advance from over advancing.

Note: This has nothing to do with vacuum advance!

Our Tr6 distributor are curved to have the proper total advance when set to 10 BTDC static timing. This results in smooth even idle, good strong power throughout the RPMs, enhances cooling and mileage.

Our new units take the place of the original 54400201, 54423098, 54429013 and 54424200 vacuum retard units.

Three important things to be checked.

1- Distributor mechanical advance should be checked and re-curved. Rebuilding assures a proper advance curve for the best performance.

2- Must be connected to ported vacuum. This can be found on the upper back side above the throttle shaft on the rear Zenith carburetor. The proper vacuum connection is important. The bottom vacuum port on the Zenith carburetor is manifold vacuum not ported vacuum!

3- The connecting link from the new vacuum unit will not flex enough to slip over the point plate mounting pin. The pin on the point plate needs to be trimmed down about 3/32 to 1/8 inch to allow the unit link to slip on and connect with free movement. Remove the two screw holding the point plate to the distributor body to allow the plate to be tilted when installing the unit link. Check that the pin is not bent and lines up with the hole in the connecting link. Once the unit is in place install the roll pin same as the original unit was mounted. Note that few but some TR6 Lucas distributors were not fully machined deep enough for the new unit to fit completely in place. You may need to cut out the bottom of the mounting hole in the distributor. You will find the timing is to be set just like before. The vacuum connected to the ported vacuum idle will be as normal but you will immediately notice a difference when driving. The vacuum unit produces additional advance when the engine revs are high, but the load is light "when the fuel is lean and slow to burn." That is when there is high vacuum in the manifold due to small throttle opening. When the engine is pulling hard on full throttle the vacuum in the manifold is low and the vacuum advance becomes wholly or partly inoperative. The spark timing is solely dependent on the centrifugal advance. The general effect of the vacuum advance unit is to increase the liveliness of the engine and a noticeable improvement in fuel consumption.

Location is critical for proper operation.

The vacuum source for the vacuum advance unit is extremely important to be located directly above the throttle butterfly to properly regulate vacuum advance at high RPMs and light load. At idle the vacuum advance unit does not operate.

We have a 30 day any reason return policy and our units have a 2 year warranty.

Email for additional information: [bv@britishvacuumunit.com](mailto:bvu@britishvacuumunit.com) Call or email for additional information.

Most British Point ignition systems.

Pure 12 volt ignition system has 12 volt power from the key to the coil + terminal.
 The - side of the coil leads to the distributor.

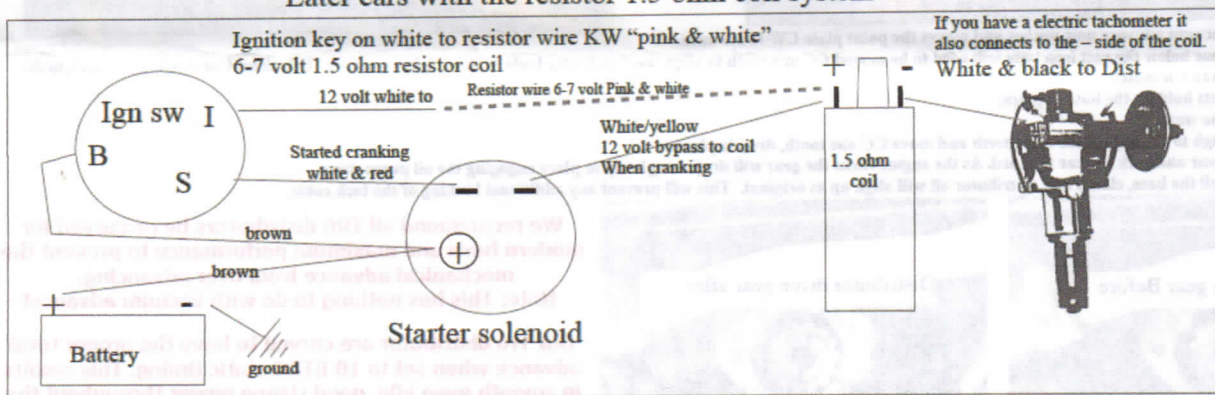
To check the coil ohms, remove all + and - wires to coil terminals and check the ohms between the + and - terminals on the coil. If you have 3 or more coil ohms you should have a pure 12 volt system.

Many later cars have a resistor system. Check the coil ohms. If you have a 1.5 ohm coil, it is really a 6 volt coil with a 1.5 ohm resistor wire or ballast resistor between the "key on power" leading to the coil to reduce the 12 volts to 6 volts. It also usually has a bypass wire from the starter solenoid leading to the + side of the coil so when the starter is engaged it sends 12 volts to the 6 volt coil for a stronger spark when the engine is cranking over. Once the engine starts up and is running it falls back to the 6 volt supply to the 1.5 ohm 6 volt coil.

Points can handle 4 amps. Point amps of 4, divided by battery voltage of 12 volts = 3 ohms. With a 12 volt battery and a 3 or more ohm coil the points operate with 4 or less amps. Any more than 4 amps to the points and they usually burn, over heat and melt close.

Most ballast resistors or resistor wire are 1.5 ohms leading to the 1.5 ohm coil to equal 3 ohms. Always check for the correct ohm coil and power feeding the coil with the key on. I often find over the years ignition parts are mismatched and the main cause of ignition problems. Simple; 1.5 ohm coil needs 6 to 7 volt with the key on. If you have 12 + volts to the coil you need a 3 or more ohm coil.

Later cars with the resistor 1.5 ohm coil system



Early cars with the pure 12 volt 3+ ohm coil system

